ABSTRACT OF DISCLOSURE

The present invention relates to method and apparatus of converting a series of data words into modulated signals. This method divides a data word, which a sync signal is to be added in front or rear of when it is written in a recording medium, into two or more word segments, generates for each word segment a number of intermediate sequences by combining mutually different digital words with that word segment, scrambles these intermediate sequences to form alternative sequences, translates each alternative sequence into a (d,k) constrained sequence, checks how many undesired sub-sequences are contained in each (d,k) constrained sequence, and selects one (d,k) constrained sequence for recording on an optical or magneto-optical recording medium among the (d,k) constrained sequences not having the undesired sub-sequence. Applying this method to a modulating device, DSV control can be conducted by much simpler hardware.